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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,848	01/08/2004	German Trabada	10121/01301	6030

7590 05/10/2010
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EXAMINER

LANG, AMY T

ART UNIT	PAPER NUMBER
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3731

MAIL DATE	DELIVERY MODE
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05/10/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/753,848	Applicant(s) TRABADA ET AL.	
	Examiner AMY T. LANG	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-13, 22, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-13, 22, 24, and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/05/2010 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-5, 7, 10-12, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (EP 0,976,417 A1) in view of Cohen et al. (US 5,167,239) and Middleman et al. (US 7,169,160 B1).

With regard to **claim 1**, Richter discloses a guidewire (2) which, when in an operative position, extends through a body lumen to a desired location and therefore overlaps the instantly claimed guide track ([0010]). Catheter (15) comprises a modular device disposed over and therefore coupled to the guidewire ([0018]). The catheter can be removed from the guidewire so that it is selectively coupled to the guidewire. Richter further teaches that the catheter comprises a drive mechanism (1) that engages the guidewire to move the catheter along the guidewire ([0019]). The drive mechanism "crawls" along the guidewire to move the catheter along the guidewire ([0016]; [0019]).

Richter teaches the guide wire is secured in place before the modular device crawls along it to the target location ([0019]). However, Richter is silent as to how the guide wire is secured and anchored.

Cohen et al. (hereinafter Cohen) discloses a guidewire with a distal anchoring device (Figure 1). A balloon (14) located on the distal end of the balloon is inflated to anchor and secure the guidewire at the desired location within a patient's lumen (column 3, lines 29-36).

However, Cohen does not specifically disclose the balloon as moveable on the guidewire. Middleman et al. (hereinafter Middleman) teaches that it is well known and advantageous for an anchoring means to move along a guide track, tubular element (18), and be deployed at various locations along the guide track (Figures 1 and 10-13;

Art Unit: 3731

column 10, line 64 through column 11, line 15). This gives more flexibility to the use of the guide track. Once deployed, the anchor secures a guide wire in place in a vessel (Figures 4 and 5; column 5, lines 9-14; column 6, lines 14-17). Ritcher teaches an advantageous method to introduce devices into the body along a guidewire that does not rely on the "pushing" mechanism of Middleman ([0002]). Ritcher specifically teaches introducing devices with a motor drive mechanism to crawl along the guidewire ([0015]). Therefore, the device is able to crawl to any desired position along the length of the guidewire ([0016]).

Since Ritcher is silent as to how the guidewire is secured and Cohen teaches a balloon anchoring mechanism to anchor guidewires within a patient's vessel, it would have been obvious to one of ordinary skill in the art at the time of the invention for Ritcher to use a balloon anchoring device. Given that Middleman teaches an anchoring device that would move along the guidewire of Cohen and Ritcher teaches an advantageous method to move the anchor, it would have been obvious to one of ordinary skill in the art for the anchoring balloon to also crawl along the guide wire by a drive mechanism as claimed. This would produce a drive mechanism located inside the Cohen balloon.

With regard to **claim 2**, the guide track (2) of Ritcher is specifically disclosed as a guidewire.

With regard to **claim 3**, as shown in Figures 1 and 2 of Ritcher, the guidewire comprises a substantially helical surface. Additionally, Cohen teaches that helically coiled wires are well known in the art (column 1, lines 19-23).

With regard to **claim 4**, the drive mechanism (1) of the catheter (15) is specifically disclosed as a motor ([0015]).

With regard to **claim 5**, Richter discloses the drive mechanism as a miniature oscillating motor, which an electric motor encompasses (see paragraph [0001] of Strobl (US 2004/0183383 A1)).

With regard to **claim 7**, Richter further discloses the catheter as comprising a guide track receiving lumen (18) ([0018]).

With regard to **claims 10 and 11**, the balloon of Cohen is the extendible member and component 26 of Cohen overlaps the inflation lumen.

With regard to **claim 12**, catheter (15) of Richter, the modular device, also comprises a balloon (19) located on the exterior of the device (Figure 7). The balloon is expanded to deploy the stent, but is also capable of anchoring the modular device within a patient's lumen ([0019]). Therefore, balloon (19) overlaps the instantly claimed second extendible member.

With regard to **claim 13**, it is the examiner's position that the balloon (19) on the exterior of the catheter intrinsically comprises an inflation lumen. This is well known in the art to expand a balloon.

5. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (EP 0,976,417 A1) in view of Cohen (US 5,167,239) and Middleman (US 7,169,160 B1) as applied to claim 1 above, and further in view of Kindlein (US 7,229,401 B2) or Ziegler et al. (US 6,971,990 B2).

Ritcher in view of Cohen and Middleman disclose a modular device, comprising a motor, moveably disposed on a guidewire. However, Ritcher does not specifically disclose the movement between the two components as activated by gears.

Kindlein, as shown in Figure 6, discloses a moveable needle advanced and retracted within a housing due to moveable and interacting wheels. Although not specifically shown, it would have been obvious for the wheels to comprise threaded gears for more accurate movement. Zielger et al. (hereinafter Ziegler) also shows movement between threaded gears to advance an object (Figures 1 and 5).

Additionally, Ritcher discloses an electric motor to move the catheter. Merely replacing the electric motor with a mechanical action simplifies the device and allows it to safely enter a patient. Since a drive mechanism utilizing gears to move an object along a track is well known in the art, as taught by Kindlein and Ziegler, it would have been obvious to one of ordinary skill in the art at the time of the invention for the drive mechanism of Ritcher to be simplified into a gear mechanism.

6. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (EP 0,976,417 A1) in view of Kindlein (US 7,229,401 B2) or Ziegler et al. (US 6,971,990 B2).

Ritcher, as discussed in paragraph 3 and incorporated here by reference, discloses a modular device driven by a drive mechanism over a guide track. The drive mechanism comprises a motor that engages the guide track to advance the modular device along the guide track.

Ritcher does not specifically disclose the drive mechanism as a threaded member that rotationally engages the guide track. Kindlein, as shown in Figure 6, discloses a moveable needle advanced and retracted within a housing due to moveable and interacting wheels. Although not specifically shown, it would have been obvious for the wheels to comprise threaded gears for more accurate movement. Zielger et al. (hereinafter Ziegler) also shows rotational movement between threaded gears (138, 140, 134, etc.) to advance an object (Figures 1 and 5). As shown in Figure 5, the threaded gears form a threaded hole that interacts with gear members (542). Additionally, Ritcher discloses an electric motor to move the modular device. Merely replacing the electric motor with a mechanical action simplifies the device and allows it to safely enter a patient. Since a drive mechanism utilizing gears to move an object along a track is well known in the art, as taught by Kindlein and Ziegler, it would have been obvious to one of ordinary skill in the art at the time of the invention for the drive mechanism of Ritcher to be simplified into a threaded gear mechanism.

7. **Claims 22, 24, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritcher (EP 0,976,417) in view of McAlister et al. (US 2002/0065523), Cohen (US 5,167,239), and Middleman (US 7,169,160 B1).

With regard to **claim 22**, Ritcher, as discussed in paragraph 3 and incorporated here by reference, discloses a modular device driven by a drive mechanism over a guide track. The modular device comprises an expandable balloon. The drive

Art Unit: 3731

mechanism comprises a motor that engages the guide track to advance the modular device along the guide track.

Ritcher does not specifically disclose the modular device used for resecting tissue or an anchoring module.

McAllister discloses a modular device (1) that moves along a guidewire (3) to the desired location ([0029]). At this point, a window (20) on the modular device draws in tissue and then severs the tissue ([0030]; [0033]; Figure 3C). Therefore, McAllister teaches a modular device that resects tissue. It would have been obvious at the time of the invention for the modular device of Ritcher to comprise a tissue resection device, as disclosed by McAllister, which would crawl along a guidewire. This would be a convenient manner in which to guide the tissue resection modular device into position without causing it to buckle which can occur during pushing.

Although Ritcher does not specifically disclose the guidewire comprising an anchoring module, Cohen discloses a guidewire with a distal anchoring balloon (Figure 1). A balloon (14) located on the distal end of the balloon is inflated to anchor and secure the guidewire at the desired location within a patient's lumen (column 3, lines 29-36).

However, Cohen does not specifically disclose a motor to advance the anchoring balloon along the guidewire. Middleman, as discussed above, teaches that it is advantageous for an anchoring device to move along a guide track so that it can deploy and anchor at various locations. Ritcher, as discussed above, teaches an advantageous system to move device along a guide track so that they can crawl along

Art Unit: 3731

the track instead of being pushed. Therefore, it would have been obvious at the time of the invention for the anchoring balloon to also comprise a module that can crawl along the guidewire to the distal location. This would allow the anchoring balloon to be advanced to the desired position after the guidewire is in place, which reduces trauma to the patient rather than advancing the balloon and guidewire simultaneously.

Therefore, Ritcher in view of McAllister, Cohen, and Middleman discloses a method of resecting tissue wherein an anchoring balloon module is advanced over a guidewire to the desired location and then expanded to secure the guidewire in place. A tissue resecting modular device is then advanced over the guidewire. The device then resects tissue and is then retracted proximally.

With regard to **claim 24**, when the anchoring balloon is expanded, the anchoring module is extended to thereby anchor the guide track.

With regard to **claim 25**, member (50) of McAllister attaches and grasps onto the tissue (Figure 3C). Therefore, before the tissue is completely cut, member (50) overlaps the claimed positioning device since it holds onto the tissue and therefore maintains the modular device in a certain position.

Response to Arguments

8. Applicant's arguments with respect to claims 1-8, 10-13, 22, 24, and 25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMY T. LANG whose telephone number is (571)272-9057. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/06/2010
/Amy T Lang/
Examiner, Art Unit 3731

/TODD E. MANAHAN/

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